

From Mark Geib, Engineer of Operations Field Services Division

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Hand Chipping on Structures

This Bridge Field Services advisory serves to delineate between pay items for hand chipping on structures. This includes standard pay items **Hand Chipping, Shallow**; **Hand Chipping, Deep**; and **Hand Chipping, Other Than Deck**. As well as **Hand Chipping, Full Depth** which is in the recommended special provision 12RC712-A060-02 “Bridge Deck Hand Chipping, Full Depth”.

All pay items are measured as areas marked by the Engineer and include the following, where applicable:

- Saw cutting the perimeter
- Removal of material
- Blast cleaning steel reinforcement
- Preparing the area for patching
- Cleaning and coating exposed structural steel
- Protecting the work and environment during cleaning

Use **Hand Chipping, Shallow** for removal of material from the top of the bridge deck to the midpoint of the top bar on the top mat of reinforcement. Typically used for shallow spalls on the deck surface.

Use **Hand Chipping, Deep** for removal of material from the top of the bridge deck to $\frac{3}{4}$ inch below exposed reinforcing steel, or until sound concrete is reached. Typically used for deteriorated concrete on the deck surface that obviously extends past the top mat of reinforcement steel.

Use **Hand Chipping, Full Depth** for removal of material from the top of the bridge deck to the bottom of the bridge deck. This item should be used when repairing spalls and deteriorations on the bottom of the deck that require a full depth patch. The top surface of the deck may be sound and require additional effort to chip to reach the deteriorated bottom.

Use **Hand Chipping, Other Than Deck** for removal of concrete from all other non-prestressed elements that are not considered the bridge deck, regardless of depth.

The pay unit for **Hand Chipping, Shallow** and **Hand Chipping, Deep** is Square Yard.

The pay unit for **Hand Chipping, Full Depth** and **Hand Chipping, Other Than Deck** is Cubic Foot.

Please contact John Belcher, Bridge Construction Engineer, Bridge Field Services with questions regarding options for hand chipping.